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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,281	05/30/2006	Max Segerljung	821-67	9226

7590 04/29/2009
Dilworth & Barrese
333 Earle Ovington Boulevard
Uniondale, NY 11553

EXAMINER

TRAN, DALENA

ART UNIT	PAPER NUMBER
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3664

MAIL DATE	DELIVERY MODE
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04/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,281	Applicant(s) SEGERLJUNG, MAX	
	Examiner Dalena Tran	Art Unit 3664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10521281	5/30/06	SEGERLJUNG, MAX	821-67

Dilworth & Barrese
333 Earle Ovington Boulevard
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EXAMINER

Dalena Tran

ART UNIT	PAPER
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3664	20090423
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DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

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DETAILED ACTION

Notice to Applicant(s)

1. This application has been examined. Claims 1-33 are pending.

The prior art submitted on 1/14/05 has been considered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 32, is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claim 32, “a network such as the Internet.” does not disclose in the applicant’s specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-33, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, line 9, the phrase “against **this**”, it is unclear and indefinite as to, what is “this” refers to; and the phrase “**which is** laterally displaced in the horizontal plane”, it is unclear as to “which is” refers to, and what is laterally displaced in the horizontal plane.

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Also, claim 1, recites the limitation "the instantaneous desired value" in line 22, and "first wheel angular alignment" in line 23. There are insufficient antecedent basis for these limitations in the claim.

Claim 3, recites the limitation "said alignment change" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 4, recites the limitation "the co-ordinates for said location" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 6, recites the limitation "the basic principle" in line 3, and "the exception" in lines 4-5. There are insufficient antecedent basis for these limitations in the claim.

Claim 7, recites the limitation "the vehicle's steering line (S)" in line 3, and "the intended line" in line 3. There are insufficient antecedent basis for these limitations in the claim.

Claim 8, the letter "i.e.," reads as "for example", renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Also, in claim 8, recites the limitation "the instantaneously existing" in line 3, and "the intended line" in line 4. There are insufficient antecedent basis for these limitations in the claim.

Claim 9, recites the limitation "first and second means" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 11, recites the limitation "the velocity" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 12, recites the limitation "the wheel's distance" in line 4. There is insufficient antecedent basis for this limitation in the claim.

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Claim 14, recites the limitation "the rotational velocity and direction" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 15, recites the limitation "the corresponding desired values" in line 3, and "the control signals" in line 4. There are insufficient antecedent basis for these limitations in the claim. Also, they are unclear and indefinite, as to what the corresponding desired values, and the control signals refers to.

Claim 17, recites the limitation "the corresponding mobility" in line 5. There is insufficient antecedent basis for this limitation in the claim. Also, it is unclear and indefinite, as to what "it" in line 4 refers to, and what is "another part" in line 4.

Claim 19, recites the limitation "two said parts" in line 2. There is insufficient antecedent basis for this limitation in the claim. Also, it is unclear and indefinite, as to what "it" in line 2 refers to, and what is "two said parts" in line 2 refers to.

Claim 20, recites the limitation "the four first wheels" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 21, recites the limitation "the other two first wheels" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 22-29, and 30, are method claims and have all the same limitations as claims 1-8, and 13-15 above. They are rejected as the same as above. All correction are required for all the claims.

Claim 31, recites the limitation "the program" in line 3. There is insufficient antecedent basis for this limitation in the claim.

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Claim 32, recites the limitation "the Internet" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Corrections are required for all of these above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-33, are rejected under 35 U.S.C.103(a) as being unpatentable over Wada (5924512) in view of McColl (4372407).

As per claim 1, Wada discloses vehicle comprising a chassis, at least two first wheels of a first type, which are arranged to support the chassis when resting on the ground and which are each arranged to be rotatable relative to the chassis not only about a first, substantially vertical axis, but also about a second axis that constitutes an angle greater than 0° but less than 90° relative to the first axis, whereby each said wheel has a contact surface against the ground that defines a so-called rolling point against this, which is laterally displaced in the horizontal plane relative to the first axis (see the abstract, and column 4, lines 33-60), means to individually control the alignment of said wheels relative to the chassis by turning about the first axis (see columns 3-4, lines 66-33), means to individually drive said wheels, a regulation device to regulate the movements of the vehicle in a horizontal plane (see column 3, lines 43-65). Wada does not disclose wheel's angular alignment relative to a lengthwise axis of the vehicle.

However, McColl discloses a control device with a calculation unit arranged to produce signals

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to control control and drive means via information from the regulation device to achieve the movement as instructed by the regulation device, wherein characterized in that, the regulation device is designed with the capability to, on request of a change of the vehicle's direction in the horizontal plane, order a location for a turning point (B) for the vehicle located anywhere in the horizontal plane, the control device's calculation unit is designed to calculate the instantaneous desired value of respective first wheel's angular alignment relative to a lengthwise axis of the vehicle corresponding to the location of turning point as ordered by the regulation device and send signals to the control means to achieve that alignment (see columns 1-2, lines 28-45; and columns 4-5, lines 61-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Wada by combining wheel's angular alignment relative to a lengthwise axis of the vehicle for controlling vehicle steering operation.

As per claim 2, Wada discloses the calculation unit is designed to assume an alignment of said first wheels about the first axis parallel to each other on calculation of the desired value for each wheel's alignment in the horizontal plane for a determined position of the- said turning point (B) to determine each wheel's turning about said first axis relative to said parallel alignment (see column 3, lines 19-30).

As per claim 3, Wada does not disclose select the alignment that has parallel alignment. However, McColl discloses the calculation unit is arranged to select the alignment that the vehicle's wheels had as the last parallel alignment before the regulation device's ordering of a- alignment change as the assumed parallel alignment in its calculations (see columns 7-8, lines 34-50). It would have been obvious to one of ordinary skill in the art at the time the invention

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was made to modify the teach of Wada by combining select the alignment that has parallel alignment for adjusting vehicle wheels orientation.

As per claim 4, Wada discloses calculation unit is designed to establish a Cartesian co-ordinate system in the horizontal plane for its calculations with the chassis' centre of rotation as origin and to utilize the co-ordinates for said location of the vehicle's turning point in co-ordinate system in the calculation of alignment of each first wheel (see columns 13-14, lines 55-46).

As per claims 5-6, Wada discloses the calculation unit is arranged to designate an axis (x) in Cartesian co-ordinate system to be directed parallel to assumed parallel alignment, and the control device is arranged to control wheels via the control means according to the basic principle that they should be mutually parallel-aligned on movement of the vehicle in the horizontal plane with the exception of when a change in the vehicle's direction in the horizontal plane is ordered by the regulation device (see column 15, lines 3-56).

As per claims 7-9, Wada discloses the regulation device comprises a first means to order a parallel displacement of the vehicle's steering line, meaning the intended line that intersects said turning point (B) and extends perpendicularly to said assumed parallel alignment; wherein the regulation device comprises a second means to displace the turning point (B) ordered by the regulation device along with the instantaneously existing steering line (S) of the vehicle, i.e., the intended line that extends through said turning point and perpendicularly to said assumed parallel alignment; wherein first and second means are controllable totally independently of one another (see columns 6-7, lines 66-34).

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As per claim 10, Wada discloses the regulation device comprises a third means to set drive means direction of the respective first wheels' driving about second axis (see columns 14-15, lines 48-2).

As per claim 11, Wada discloses the regulation device comprises a fourth means to set the velocity of the respective first wheels rotation about the second axis brought about by the drive means (see columns 6-7, lines 66-34).

As per claim 12, Wada discloses the calculation unit is arranged to calculate a suitable rotational velocity of the wheel about its second axis in co-operation with said fourth means for each first drivable wheel from the wheel's distance from said turning point (see column 6, lines 31-65).

As per claim 13, Wada discloses arranged at each of the vehicle's wheels to sense the wheels' alignment about the first axis relative to the chassis (see columns 8-9, lines 10-4).

As per claim 14, Wada does not disclose direction of rotation about second axis of the wheel. However, McColl discloses arranged at each of the vehicle's drivable wheels to sense the rotational velocity and direction of rotation about second axis of the wheel (see columns 6-7, lines 19-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Wada by combining direction of rotation about second axis of the wheel for controlling vehicle wheels rotation.

As per claim 15, McColl discloses the control device comprises means arranged to compare the result of sensing with the corresponding desired values ordered via the calculation units calculations, and to correct the control signals to the control means/drive means on

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deviation between result and desired value (see the abstract; columns 6-7, lines 19-9; and column 7, lines 10-62).

As per claim 16, McColl discloses the control device comprise a programmable computer (see column 7, lines 10-62).

As per claims 17-19, Wada discloses apart from the two first wheels it comprises at least one further part arranged to support the chassis and form a third support point for it on the ground, and that part is formed from a link-wheel or another part with at least the corresponding mobility; further part is first wheel; wherein it comprises two parts, both constituted of a first wheel (see columns 5-6, lines 59-30).

As per claims 20-21, Wada discloses the four first wheels are attached to the chassis substantially in each corner of a rectangle in the horizontal plane; the two first wheels are individually drivable and controllable, and the other two first wheels are individually controllable (see columns 8-9, lines 10-4).

Claims 22-29, and 30, are method claims corresponding to vehicle claims 1-8, and 13-15 above. Therefore, they are rejected for the same rationales set forth as above.

As per claim 31, McColl discloses computer program that is directly loadable into the internal memory of a computer and comprises software means to control the steps according to claim 22 when the program is run on a computer (see column 7, lines 10-62).

As per claims 32-33, McColl discloses at least partially via a network such as the Internet, and computer-readable medium with a registered program thereon, which is arranged to cause a computer to control the steps according to claim 22 (see column 7, lines 10-62).

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

. Weadling et al. (6721629)

. H.F. Flowers (2110213)

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-W (in a first week of a bi-week), and T-R (in a second week of bi-week) from 7:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi H. Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dalena Tran/
Primary Examiner, Art Unit 3664

April 23, 2009

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